



# Pressure test facilities

## In house testing for fatigue, stress rupture, burst testing and proof testing

Experienced and equipped for doing full scale burst testing up to 1600 bar. Automated fatigue testing in controlled environment. Automated proof testing of pressure vessels.

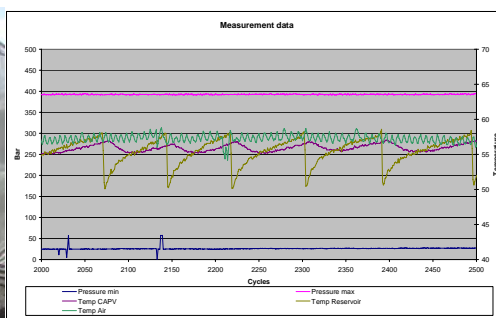
### Introduction

Pressure testing is essential in developing and manufacturing pressurized equipment, such as pressure vessels and hydraulic cylinders. UAC has for that reason established in house test facilities for development testing, as well as for proof testing.

### UAC test cell

UAC has established a test laboratory in Mandal, with a secure test cell for testing pressure vessels in a temperature controlled environment, and over longer periods of time. This test cell was built with fatigue testing in mind, but is highly adaptable, and can be used for a number of specialised tests.

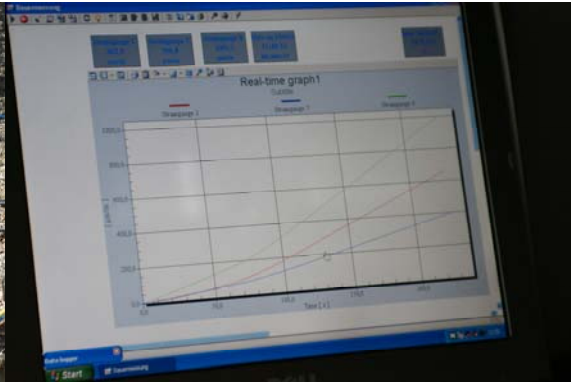
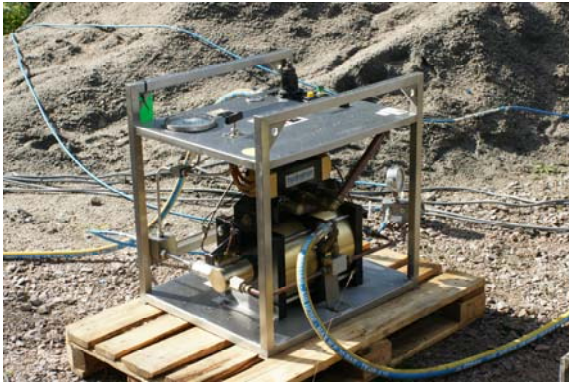
- Temperature range: Air  $-30^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ , liquid:  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Pressure range cyclic: 0-500 bar
- Pressure range static: 1600 bar
- Test chamber allowing pressure vessels up to 6 meters long and 1 meter diameter
- Automatic pressure cycling for long term fatigue testing



### Data logging

Using data acquisition system based on portable measurement amplifiers from HBM, with catman data acquisition software, allows for great flexibility and powerful post processing.

- Highly adaptable for various test scenarios, field or laboratory
- Large choice of measurement transducers
- Programmable for real time post processing and intuitive user interfaces



### Burst testing

Full scale burst testing is done at a remote location for safety reasons. UAC has portable pump and data logging equipment for burst testing up to 1600 bar. Pressure and strain values are continuously logged during tests.



### Production proof testing

An automatic test routine is set up for production proof testing. Once the pressure vessel is connected, the routine pressurizes the tank, logging pressure and expansion and then prints a test certificate.

- Consistent testing, with lower margin for error
- User friendly intuitive interface
- Less labour intensive, the workers can start a test and then go about doing other task

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